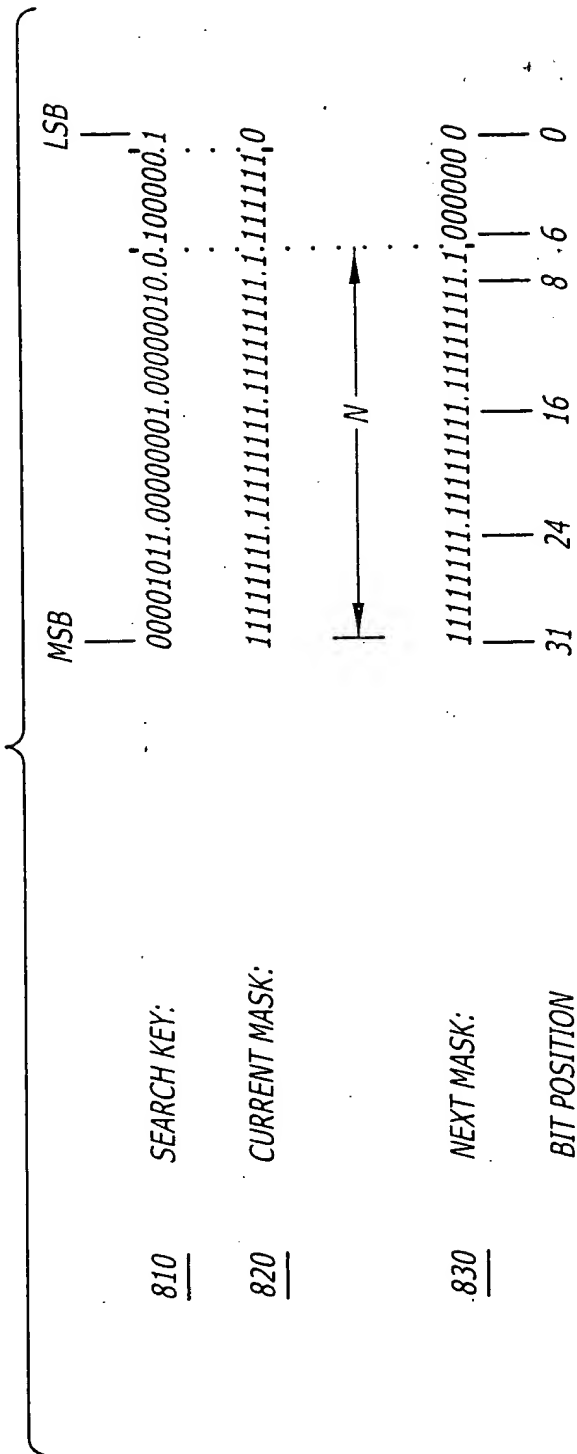
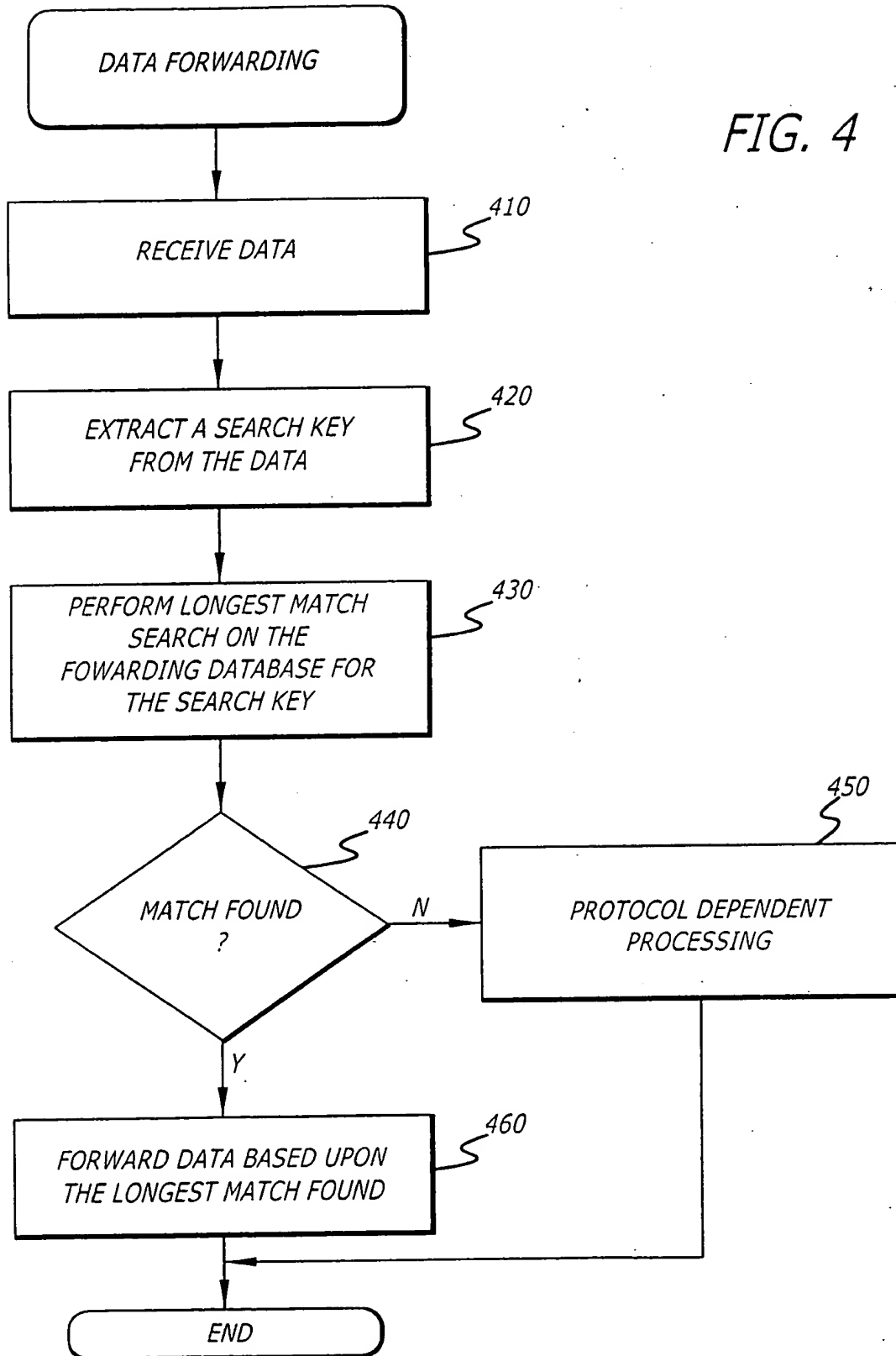


FIG. 3

| | | | |
|------------|----------------------|-------------|-------------------------------------|
| <u>310</u> | DESTINATION ADDRESS: | 11.1.2.65 | 00001011.00000001.00000010.01000001 |
| <u>320</u> | ROUTE #1 | 11.1.2.0/24 | 00001011.00000001.00000010.00000000 |
| <u>330</u> | ROUTE #2 | 11.1.0.0/16 | 00001011.00000001.00000000.00000000 |
| <u>340</u> | ROUTE #3 | 11.0.0.0/8 | 00001011.00000000.00000000.00000000 |

FIG. 8





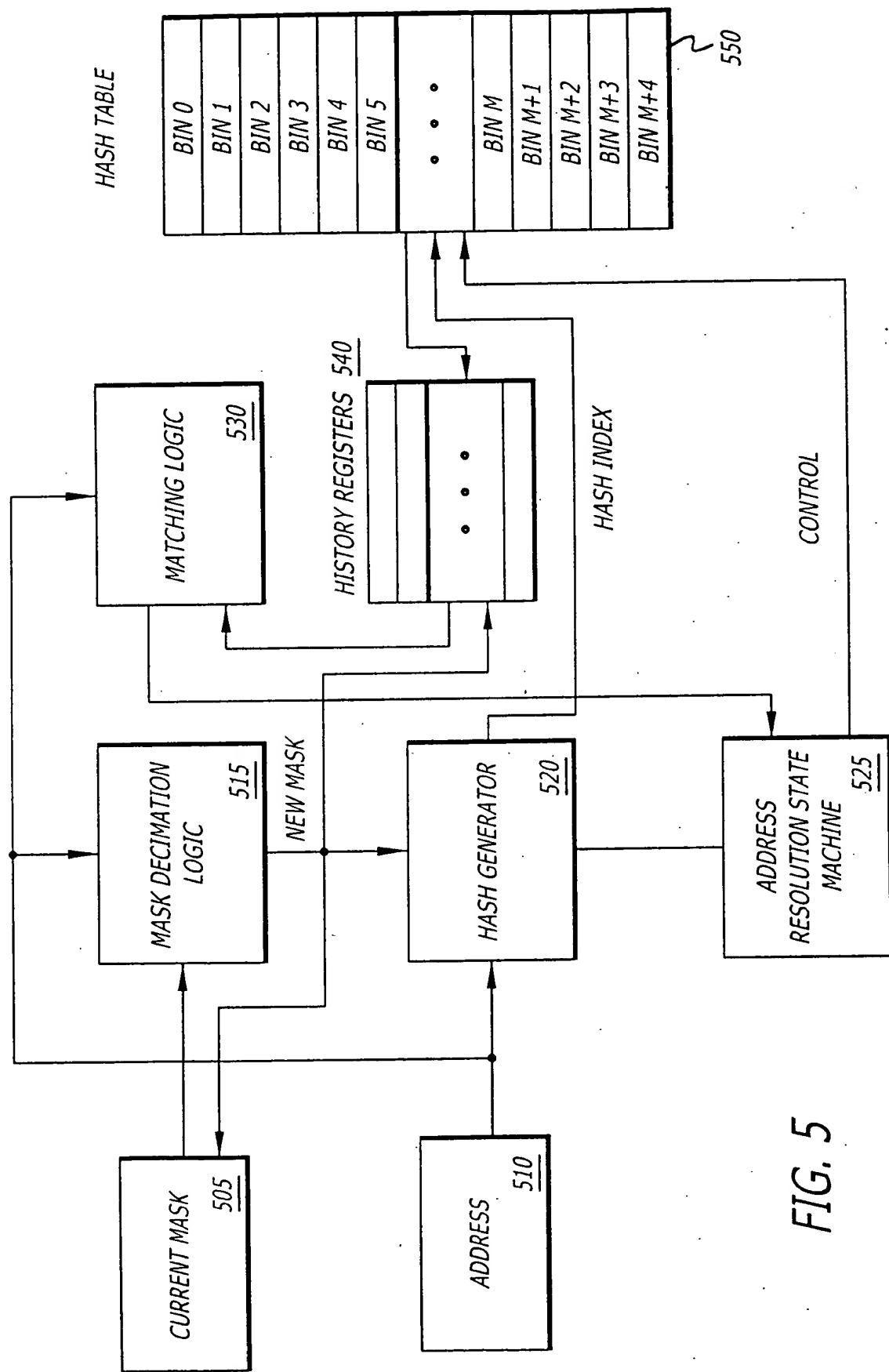
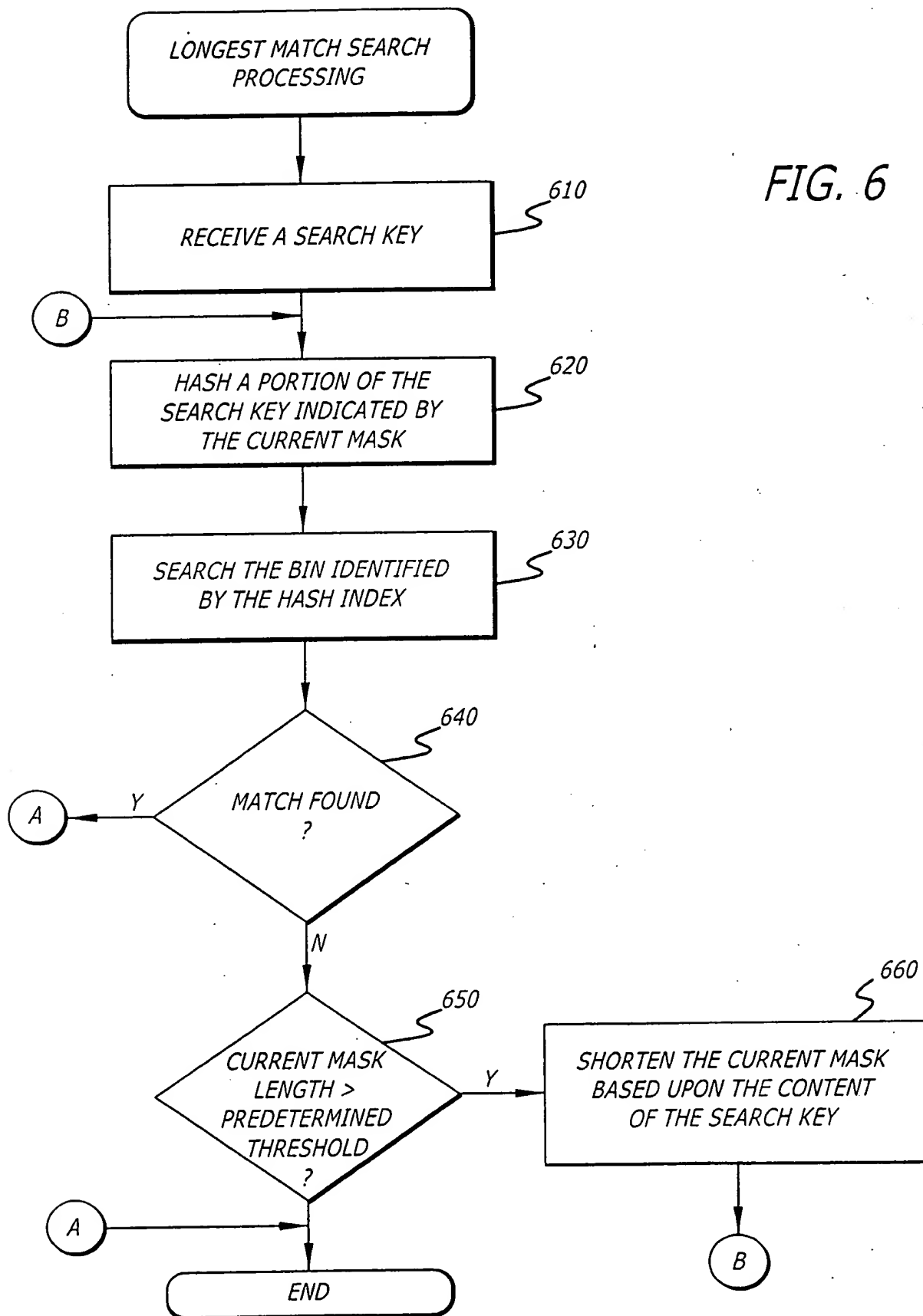
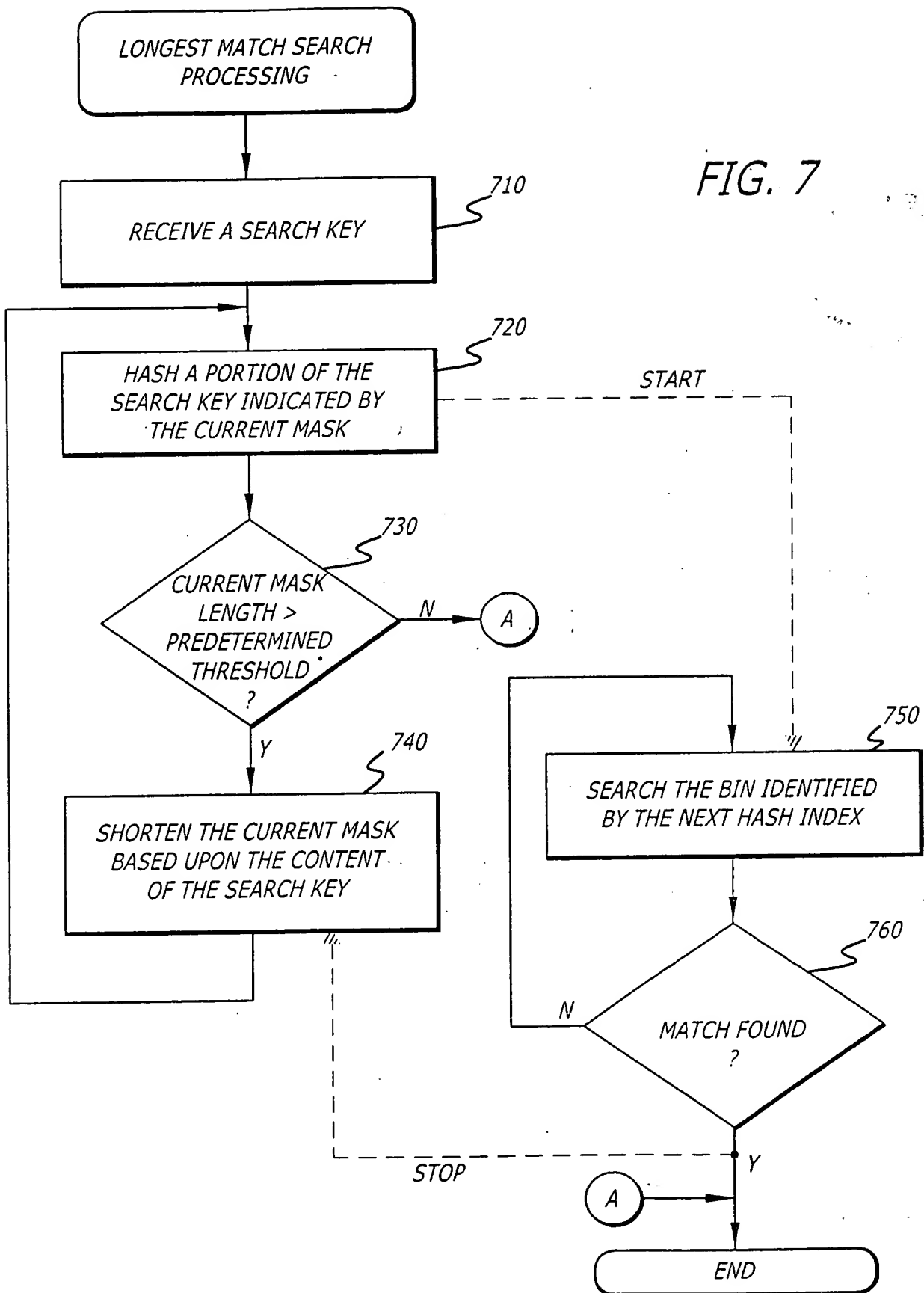


FIG. 5

FIG. 6



100740 8022860



BIT-WISE MASK DECIMATION

310

| ADDRESS (HEX) | ITERATION | MASK (HEX) | MASKED ADDRESS (HEX) |
|---------------|-----------|-------------|----------------------|
| 0B 01 02 41 | 1 | FF FF FF FF | 0B 01 02 41 |
| | 2 | FF FF FF FE | 0B 01 02 40 |
| | 3 | FF FF FF FC | 0B 01 02 40 |
| | 4 | FF FF FF F8 | 0B 01 02 40 |
| | 5 | FF FF FF F0 | 0B 01 02 40 |
| | 6 | FF FF FF E0 | 0B 01 02 40 |
| | 7 | FF FF FF C0 | 0B 01 02 40 |
| | 8 | FF FF FF 80 | 0B 01 02 00 |

← MATCH

FIG. 9

ADDRESS-SENSITIVE MASK DECIMATION

310

| ADDRESS (HEX) | ITERATION | MASK (HEX) | MASKED ADDRESS (HEX) |
|---------------|-----------|-------------|----------------------|
| 0B 01 02 41 | 1 | FF FF FF FF | 0B 01 02 41 |
| | 2 | FF FF FF FE | 0B 01 02 40 |
| | 3 | FF FF FF 80 | 0B 01 02 00 |
| | 4 | FF FF 00 00 | 0B 01 00 00 |
| | 5 | FF 00 00 00 | 0B 00 00 00 |

← MATCH

FIG. 10

| ADDRESS | ... | MASK |
|-------------------------------------|-----|-------------------------------------|
| 00011000 00010000 00000010 00000000 | | 11111111 11111111 11111111 00000000 |
| 00011000 00010000 00000000 00000000 | | 11111111 11111111 00000000 00000000 |
| ... | | |
| 00011000 00000000 00000000 00000000 | | 11111111 00000000 00000000 00000000 |

FIG. 11A (Prior Art)

| ADDRESS | ... | MASK LENGTH |
|-------------------------------------|-----|-------------|
| 00011000 00010000 00000010 00000000 | | 11000 |
| 00011000 00010000 00000000 00000000 | | 01000 |
| ... | | |
| 00011000 00000000 00000000 00000000 | | 00100 |

FIG. 11B (Prior Art)

| ADDRESS + MASK INFORMATION | ... |
|---------------------------------------|-----|
| 00011000 00010000 00000010 10000000 0 | |
| 00011000 00010000 10000000 00000000 0 | |
| ... | |
| 00011000 10000000 00000000 00000000 0 | |

FIG. 11C